

IN THE CLAIMS:

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1. (Amended) A method for raising the concentration of a first class of immunoglobulin relative to at least a second class of immunoglobulin in a compartment of [the] a body of a non-human animal or progeny thereof, said method comprising:

providing a cell bordering said compartment[,] with a nucleic acid encoding a protein capable of transporting a member of said first class of immunoglobulin from the cell's basolateral side to the cell's apical side [of said cell].

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3. (Amended) The method according to [claim 1 or] claim 2, wherein said protein comprises polymeric immunoglobulin receptor or a functional part, derivative and/or analogue thereof.

4. (Amended) The method according to [anyone of claims 1-3] claim 3, wherein said cell comprises a mammary gland cell.

5. (Amended) The method according to [anyone of claims 1-4] claim 4, wherein said non-human animal is a farm animal.

6. (Amended) The method according to claim 5, wherein said farm-animal [comprises] is selected from the group consisting of a cow, a goat, a sheep, a camel, a lama [and/or] and a rabbit.

7. (Amended) The method according to [anyone of claims 1-6] claim 6, wherein said nucleic acid comprises a promoter capable of driving expression of said protein essentially specifically in said cell and/or a functional equivalent of said cell.

8. (Amended) The method according to [anyone of claims 1-7] claim 3, further comprising inducing and/or amplifying an antigen specific immunity in said non-human animal.

9. (Amended) The method according to [anyone of claims 1-8] claim 8, wherein said cell comprises said protein in an amount that is at least 10-fold higher than an endogenously expressed analogous and/or homologous immunoglobulin transporter protein.

10. (Amended) A non-human animal wherein a cell of said animal comprises a recombinant nucleic acid encoding a protein capable of transporting an immunoglobulin from the cell's basolateral side to the cell's apical side [of said cell].

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12. (Amended) The non-human animal of [claim 10 or] claim 11, wherein said animal is a farm-animal.

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CONT.

13. (Amended) Secretory fluid [obtainable from an] produced by non-human animal
[according to anyone of claims 10-12] of claim 10.

Please cancel claims 15 and 16 without prejudice or disclaimer.

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17. (Amended) A method for collecting an immunoglobulin from a non-human animal comprising:

providing [an] a secretory cell of said animal with a nucleic acid encoding a protein capable of transporting said immunoglobulin from the cell's basolateral side to the cell's apical side [of said cell], [the method further comprising]

collecting secretory fluid produced by said cell and/or the tissue said cell is a part of, and obtaining said immunoglobulin.

18. (Amended) [A] The method according to claim 17, further comprising administering to said animal or a part thereof, a substance capable of enhancing expression of a nucleic acid encoding said protein.

19. (Amended) [A] The method according to claim 18, wherein said substance [comprises] is selected from the group consisting of interferon-g, interleukin-1, interleukin-4 [and/or] and tumor necrosis factor- α .

20. (Amended) A method for collecting an immunoglobulin from a non-human animal comprising:

enhancing expression of a protein capable of transporting said immunoglobulin from the an epithelial cell's basolateral side to the epithelial cell's apical side [of an epithelial cell of said animal, the method further comprising]

collecting secretory fluid produced by said cell and/or the tissue said cell is a part of, and obtaining said immunoglobulin.

Please add the following claims:

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21. The method according to claim 1 wherein said protein comprises polymeric immunoglobulin receptor or a functional part, derivative and/or analogue thereof.

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